

### **REMARKS**

The Applicants and the undersigned thank Examiner Nguyen for a careful review of the present application. Consideration of this application is respectfully requested in view of the following remarks, which are responsive to the Official Action mailed June 14, 2006.

Upon entry of this Amendment, Claims 23-60 are pending in the present application, with Claims 23, 32, 39, 44, 53, and 57 being independent claims. The Examiner has rejected Claims 23-56. Without adding new matter, the Applicants have amended Claims 23, 24, 33, 39, 44, 46, 47, and 53 and have added Claims 57-60.

The Examiner rejected Claims 23-26, 29, and 31 based on an assertion that these claims are rendered obvious under 35 U.S.C. § 103(a) by U.S. Patent Number 6,356,632 to Foster et al. (hereinafter "*Foster*"). The Examiner further rejected Claims 27-28, 30, and 44-52 as being obvious over *Foster* in view of U.S. Patent Number 6,128,380 to Shaffer et al. (hereinafter "*Shaffer*"). Claim 33 was rejected as being obvious over *Shaffer*, while Claims 37, 41, and 53-56 were rejected as being obvious over *Shaffer* in view of *Foster*. Finally, the Examiner issued rejections under 35 U.S.C. § 102(e) for Claims 32, 34-36, 38-40, 42, and 43 as being anticipated by *Shaffer*. The Applicants offer the following remarks to traverse the pending rejections.

**I. Independent Claims 23, 32, 39, 44, 53, and 57 are patentable over *Foster* and *Shaffer***

As discussed below, *Shaffer* teaches using unexpected occurrences of idle time as a trigger to push training to agents, while *Foster* teaches controlling call distribution to avoid interfering with a static break schedule, both of which contrast with the claimed invention.

**A. *Shaffer***

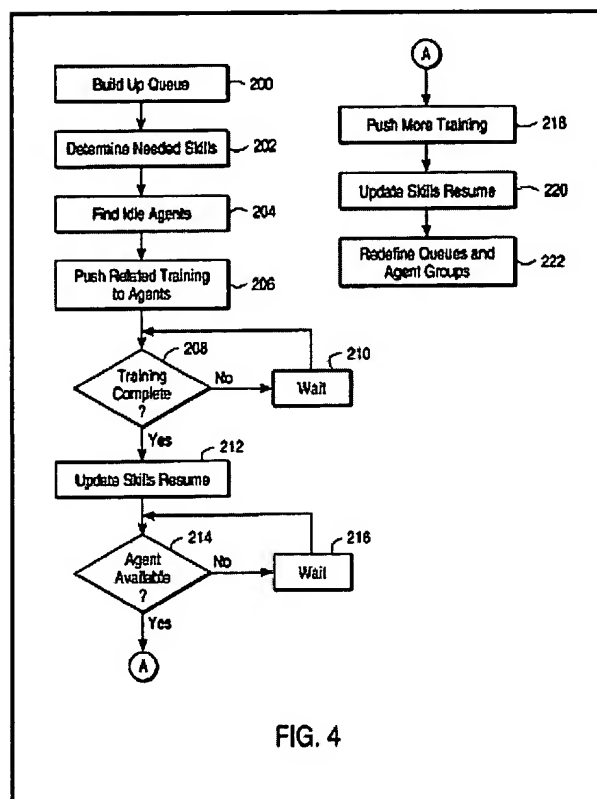
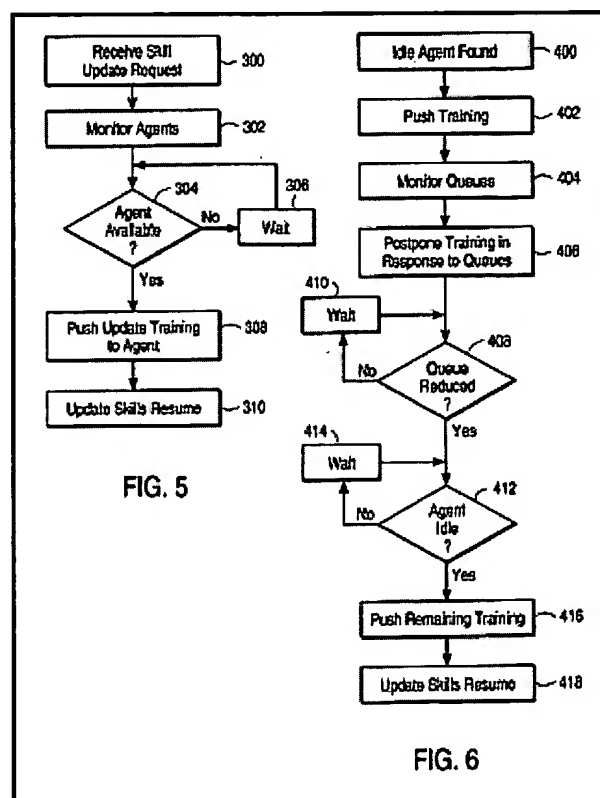
In support of his allegation that *Shaffer* anticipates Claims 32 and 39, the Examiner has asserted that *Shaffer* teaches "analyzing the call center load data to determine when to schedule a training session for the contact agent (col. 4, lines 8-12); and scheduling the training session so that the contact agent can accept training information without disrupting the interaction duties of the contact agent (col. 4, lines 10-17)." The Applicants respectfully disagree with the Examiner's characterization of *Shaffer*.

In contrast to analyzing call center load data to determine when to schedule a training session, *Shaffer* teaches pushing training to agents when idle time unexpectedly occurs, as

determined by monitoring queue activity in real time. That is, *Shaffer's* training occurs without planning or scheduling a training session. See *Shaffer*, lines 2-17 of column 4 and Abstract.

*Shaffer* teaches that using unexpected idle time for unscheduled training is required because call patterns are too unpredictable for scheduled training. At lines 55-60 of column 2 *Shaffer* explains, "It is difficult to predict the calling patterns that surround new announcements, product introductions, and the like. For example, one cannot predict how many internationally trained agents an airline will need to handle the calls generated by a fare war on flights to London. A dynamic solution is needed to provide the most efficient use of available resources."

As shown in Figures 4, 5, and 6 of *Shaffer*, inserted below, *Shaffer's* training methods include waiting, in a loop, until an agent becomes available. In response to an agent becoming available, as determined by real time monitoring, training is pushed to the agent. Flowchart elements 204 and 206 of Figure 4 depict finding idle agents and pushing training to those found idle agents. The three processes that Figures 4, 5, and 6 illustrate each contains an iterative loop (at elements 214/216, 304/306, and 412/414) for waiting until queue monitoring indicates that an agent has become idle. An agent becoming idle triggers the pushing of training to the agent in the step immediately following each wait loop (at elements 218, 308, and 416).

Figure 4 of *Shaffer*Figures 5 and 6 of *Shaffer*

### B. *Foster*

The disclosure, teachings, and suggestions of *Foster* likewise contrast with analyzing call center load data to determine when to schedule a training session for the contact agent and scheduling the training session so that the contact agent can accept training information without disrupting the interaction duties of the contact agent.

*Foster* discloses and teaches controlling the distribution of calls to an agent during a timeframe leading up to a scheduled break to avoid having calls disrupt the break schedule by extending into a scheduled break. In other words, rather than defining a schedule based on load data, *Foster* discloses managing workload to preserve a predefined, fixed schedule. See *Foster*, lines 51-64 of column 4 and lines 5-8 of column 5.

Figure 3 of *Foster*, which has been inserted below for discussion purposes, further illustrates how *Foster* teaches managing call distribution to preserve a break schedule. At Step 200 of the illustrated process, “agent’s scheduled breaks for call handling are known in advance.” At Step 230, a modified agent selection process assigns a call to an agent only if the call has an expected handling time that is short enough to avoid interfering with the scheduled break. In other words, calls are distributed to agents in a manner that attempts to avoid interfering with breaks that are scheduled and known in advance.

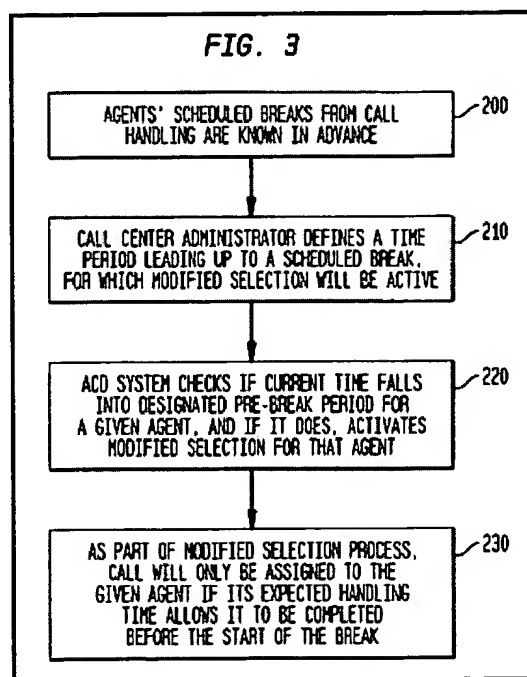


Figure 3 of *Foster*

### C. Claims 23, 32, 39, 44, 53, and 57

The Applicants submit that Claims 23, 32, 39, 44, 53, and 57 are distinguishable over *Foster*, *Shaffer*, and an alleged combination thereof at least because each of those claims recites one or more features that is not disclosed, not taught, and not suggested by either reference. Moreover, each claim recites a combination of features that the cited references do not disclose, teach, or suggest. A brief discussion of selected ones of the distinguishing features follows.

#### Claim 57

Claim 57 is a new independent claim defining a method for scheduling training for agents of a contact center who service contacts. The method requires: (a) receiving workload data from a device that monitors interactions between the agents and the contacts; (b) processing the received workload data to identify a cyclical change in workload that has occurred in the past; (c) projecting the cyclical change in workload into the future to predict a future time of decreased workload; and (d) planning to hold a training session at the predicted future time.

The cited references do not disclose identifying a cyclical change in workload that has occurred in the past, projecting the cyclical change into the future to predict a future time of decreased workload, and planning to hold a training session at the predicted future time. As discussed above, the disclosures of *Foster* and *Shaffer* contrast with the invention of Claim 57, in particular the steps arbitrarily denoted “b,” “c,” and “d” in the preceding paragraph.

As discussed above, *Shaffer* discloses monitoring queue activity to detect unexpected idle time and using occurrences of such idle time as a trigger to push training to agents who have become unexpectedly idle. Also as discussed above, *Foster* teaches distributing calls to agents to avoid interfering with breaks that have been scheduled in advance.

Moreover, as discussed above, *Shaffer* teaches that, “It is difficult to predict the calling patterns that surround new announcements, product introductions, and the like. For example, one cannot predict how many internationally trained agents an airline will need to handle the calls generated by a fare war on flights to London.” See *Shaffer* column 2, lines 55-60.

Thus, the Applicants submit that the disclosures of *Foster* and *Shaffer* contrast with the invention of Claim 57 and that the invention of Claim 57 is distinguishable from *Foster* and *Shaffer*.

### Claim 23

As amended, the method of Claim 23 requires, among other things, the steps of: processing historical call volume data to identify a call volume pattern in the historical call volume data; predicting a time during which call volume is expected to be at a declined level based on the identified call volume pattern; and scheduling a time slot at the predicted time for training so that the agent can accept training information without disrupting the agent's interaction duties.

As discussed above, neither *Foster* nor *Shaffer* discloses identifying a pattern in historical call volume data, predicting a time when call volume is expected to be at a declined level based on the identified pattern, and scheduling a time slot at the predicted time for training in accordance with the recitations of amended Claim 23. *Shaffer* teaches that call patterns are too unpredictable to support scheduling training sessions. See *Shaffer*, column 2, lines 55-60.

### Claim 32

The Examiner has asserted that *Shaffer* discloses each and every feature of Claim 32. However, Claim 32 requires analyzing call center load data to determine when to schedule a training session. As discussed above, the Applicants submit that *Shaffer* does not disclose analyzing load data to determine when to schedule a training session.

### Claim 39

Claim 39, as amended, defines a method that requires, *inter alia*, the steps of: processing the received call center load data to identify a historical pattern of declined call center load; projecting the identified pattern into the future to predict a time of declined call center load when the agent is likely to be available for a training session; and scheduling the training session during the predicted time. As discussed above, *Foster* and *Shaffer* fail to disclose these features.

### Claim 44

As amended, Claims 44 recites identifying past occurrences of lulls in contact center activity; predicting future occurrences of lulls in contact center activity based on the identified past occurrences; and scheduling a training session to coincide with one of the predicted future occurrences. *Foster* and *Shaffer* do not disclose, teach, or suggest these recited features.

## Claim 55

The invention of amended Claim 55 requires a scheduling component adapted to receive schedule data and workload data and to schedule a training session for the agent based on the agent's predicted availability to accept training. As discussed above, the cited references fail to disclose scheduling a training session based on an agent's predicted availability.

## Summary

In view of the foregoing discussion of distinctions between the art that the Examiner has cited and the amended claims, the Applicants submit that each pending independent claim is distinguishable over that art. Accordingly, the Applicants courteously ask the Examiner to withdraw the pending rejections.

## II. **Dependent Claims 24-31, 33-38, 40-43, 45-52, 54-56, and 58-60 are patentable over *Foster and Shaffer***

Each of dependent Claims 24-31, 33-38, 40-43, 45-52, 54-56, and 58-60 incorporates the recitations of the respective claim or claims from which it depends. In view of the above-described distinctions between the references cited by the Examiner and independent Claims 23, 32, 39, 44, 53, and 57, as amended, the Applicants respectfully submit that dependent Claims 24-31, 33-38, 40-43, 45-52, 54-56, and 58-60 are also patentable over *Foster and Shaffer*. Furthermore, each dependent claim recites features and combinations of features further defining the present invention over the cited art. Accordingly, the Applicants request separate and individual consideration of each dependent claim and offer a discussion of a few such features.

### A. ***Foster* does not disclose an agent electing to terminate interaction duties**

#### Claim 24

Amended Claim 24, which depends from Claim 23, requires that the step of terminating the interaction duties comprises the agent spontaneously electing to terminate interaction duties to receive the training information.

On page 2 of the Official Action, the Examiner has cited column 3, lines 10-17 and column 5, lines 39-41 of *Foster* in support of his assertion that *Foster* teaches terminating the interaction duties is performed by the agent. The Applicants respectfully disagree and submit that *Foster* does not teach or disclose an agent spontaneously electing to terminate the agent's interaction duties as required by the invention of amended Claim 24.

In contrast to the agent spontaneously electing to termination his or her interaction duties, *Foster* teaches that the termination of interaction duties proceeds automatically, outside the agent's control. For example, at lines 39-41 of column 5, *Foster* states, "Similarly, a training session, or any other type of predetermined event, may appear on the schedule of a given agent as a reason for taking the agent off of handling calls." (Emphasis added.)

As discussed above, *Foster* teaches controlling a contact center so that a predefined schedule is "closely adhered to," rather than providing an agent autonomy to make decisions regarding terminating or continuing interaction duties. *See Foster*, column 1, lines 59-63.

The Applicants submit that *Shaffer's* disclosure also contrasts with the invention of amended Claim 24. *Shaffer* has training automatically pushed to the agent, rather than allowing the agent to terminate interaction duties to receive training. *See Shaffer*, Figures 4, 5, and 6.

#### Claims 41, 49, and 60

Claim 41 requires a step of prompting the agent that the training is available during the predicted time. Claim 49 requires that the step of disconnecting the contact agent from a contact engine is controlled by the agent. Meanwhile, new Claim 60, which is dependent upon Claim 57, requires the step of, at the predicted time, offering one of the agents an option of holding the planned training session or continuing to service contacts.

As discussed above, the Applicants submit that the teachings of *Shaffer* and *Foster* contrast with allowing an agent to control a training session in a manner consistent with the recitations of Claims 41, 49, and 60.

#### **B. Claim 35 is distinguishable from *Shaffer***

Claim 35 requires the steps of: (a) accepting agent performance data from a quality monitoring component; and (b) analyzing the agent performance data in combination with the call center load data to determine when to schedule the training session. The Examiner has rejected Claim 35 under 35 U.S.C. § 102(e) based on an assertion that *Shaffer* anticipates the invention of Claim 35 and has cited column 5, lines 5-18 of *Shaffer* in support of that assertion.

The Applicants respectfully submit that *Shaffer* does not disclose each and every feature of Claim 35, neither at the cited section, nor elsewhere. At column 5, lines 5-18, *Shaffer* discusses pushing information to an agent in advance of the agent receiving a specific incoming call when the agent needs the information for the call. In contrast to the disclosure of *Shaffer*,

the invention of Claim 35 requires analyzing agent performance data in combination with call center load data to determine when to schedule the training session.

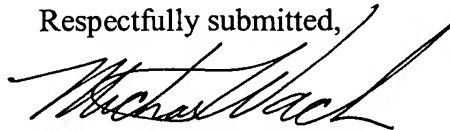
In view of the above discussion of contrasts between selected features of the dependent claims and the cited references, the Applicants submit that these claims are patentable over *Shaffer* and *Foster* and respectfully request for the Examiner to withdraw the pending rejections.

### **CONCLUSION**

To the extent that the Applicants have not addressed each specific point that the Examiner has raised or each specific rejection of every independent and dependent claim, the Applicants submit this paper shows that the independent claims, and thus all the claims, are allowable over the cited references. The Applicants have not acquiesced to any such rejection or point raised by the Examiner and reserve the right to address the patentability of any additional claim features in the future.

The foregoing is submitted as a full and complete response to the Official Action mailed June 14, 2006. The Applicants thank Examiner Nguyen for consideration of the amendments and remarks presented by this paper. The Applicants have shown that the pending claims are allowable and allowance of the claims is respectfully requested. It is believed that this response places the application in condition for allowance. Such action is courteously requested. If there are any issues that can be resolved with an Examiner's Amendment or a telephone conference, a telephone call to the undersigned at 404.572.3486 is respectfully requested.

Respectfully submitted,



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